



A U.S. Manufacturing Resurgence

Can The U.S. Turn A Cyclical Rebound Into A Resurgence?

Presented by:

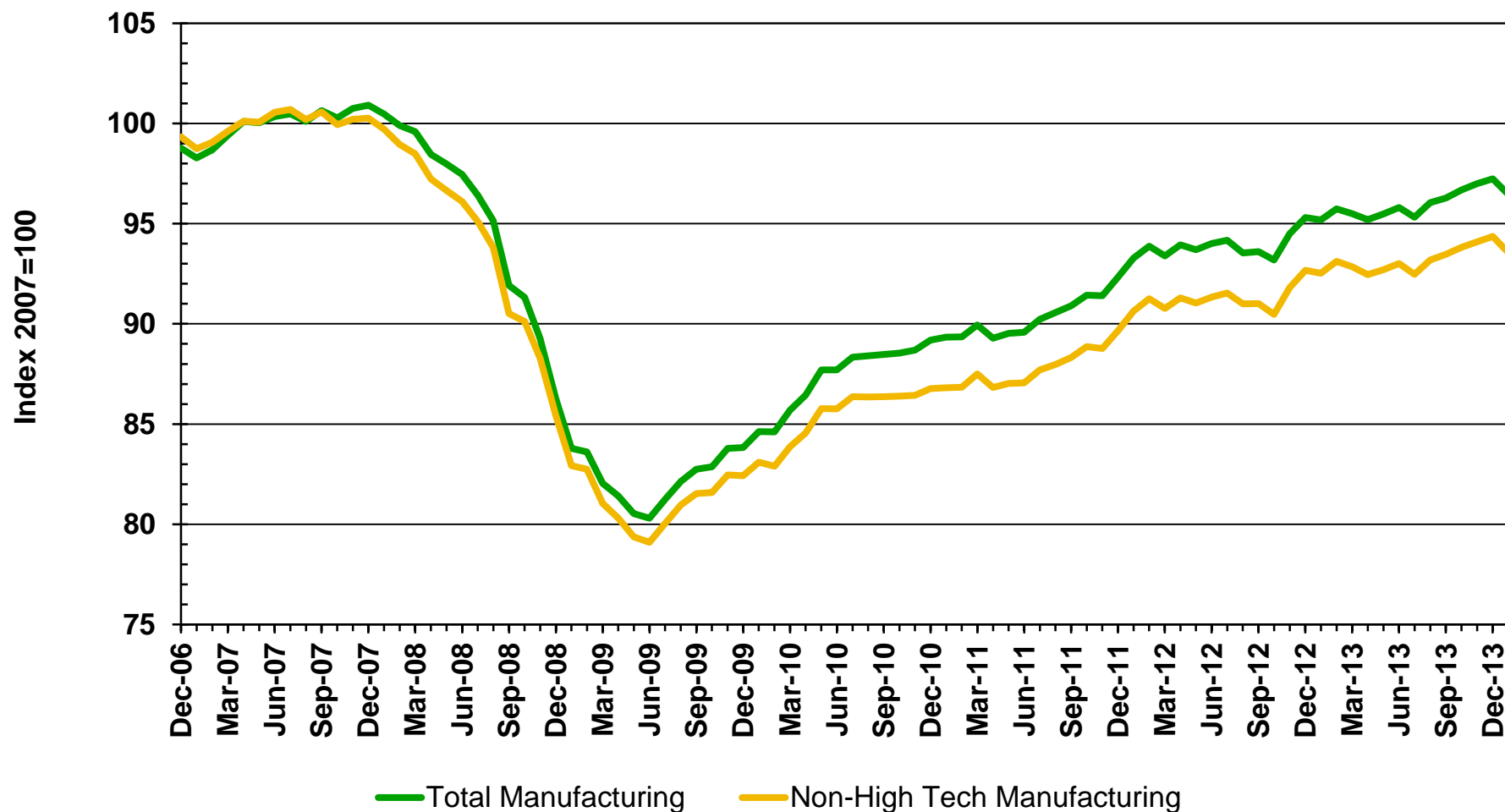
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U.S. Manufacturing Is Only 78 Percent Recovered

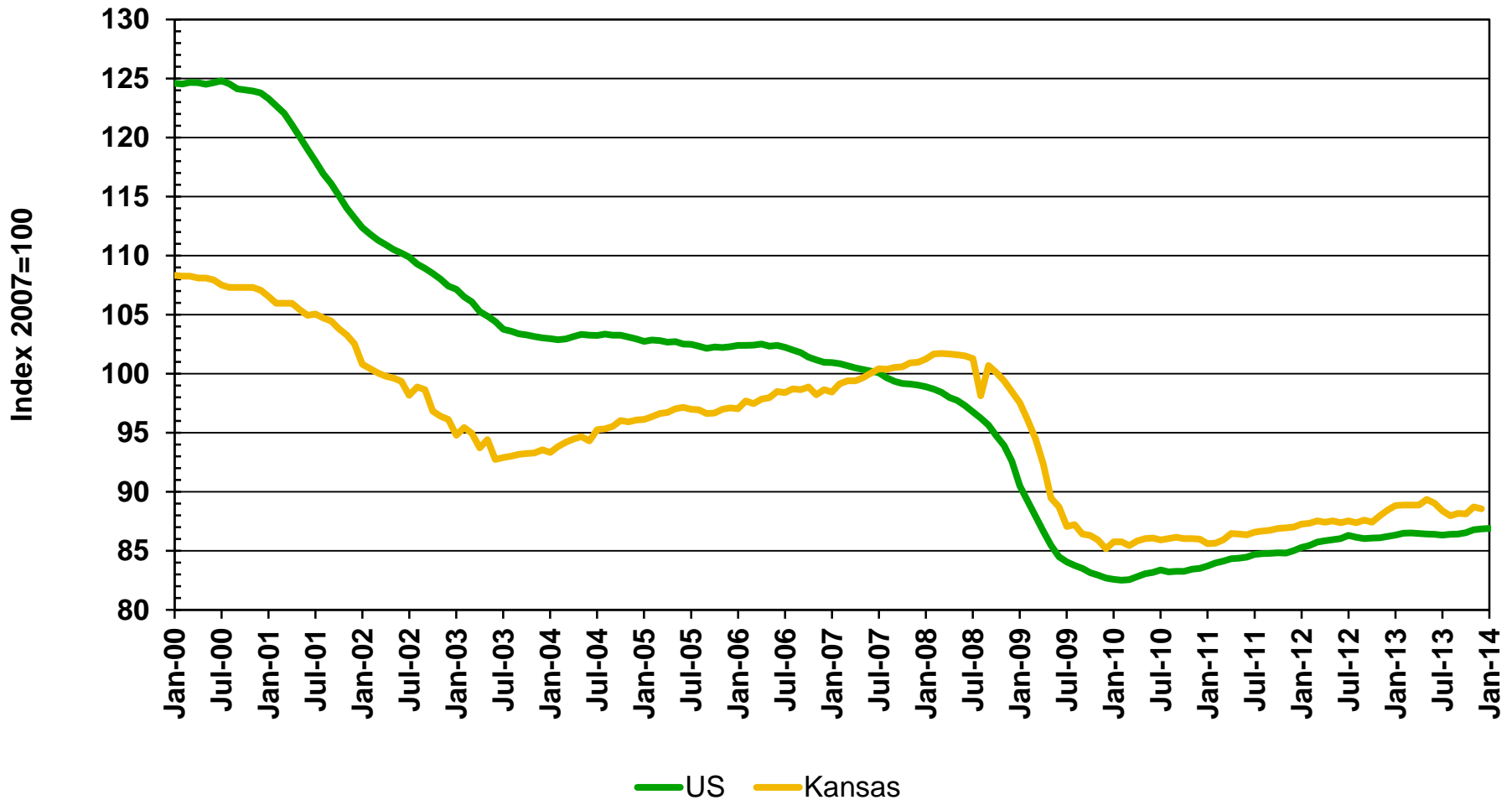
Manufacturing Industrial Production



Source(s): Federal Reserve Board and MAPI

Manufacturing Adding Jobs Again. Cyclical Recovery or Resurgence?

Manufacturing Employment



Source(s): U.S. Bureau of Labor Statistics and MAPI

A Cyclical Recovery in Manufacturing Share of GDP; Number of Plants Starting to Level Out

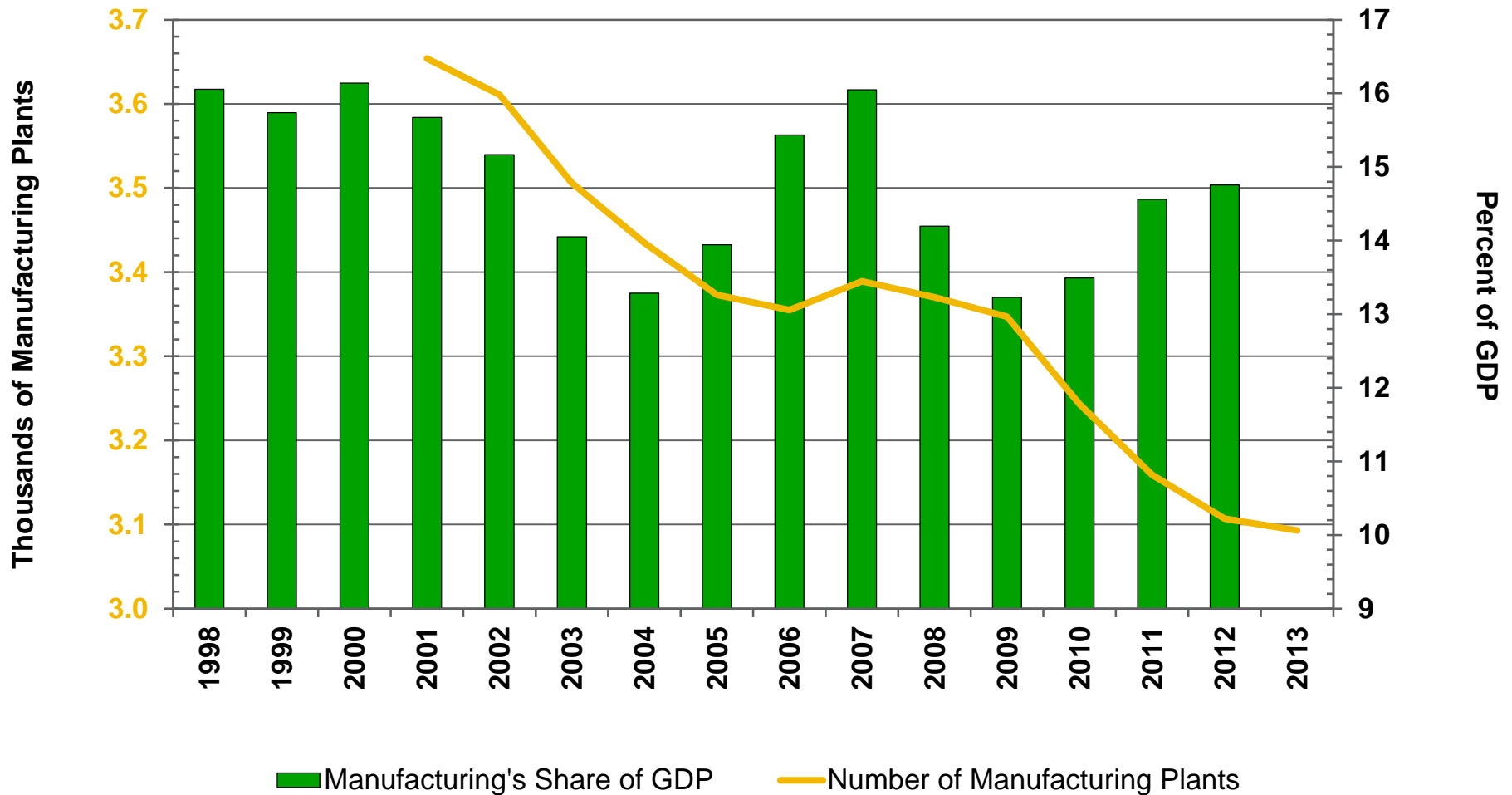
U.S. Manufacturing Plants and Share of Economic Output



Source(s): U.S. Bureau of Economic Analysis and U.S. Bureau of Labor Statistics and MAPI

Kansas Loses Less Share But Similar Change in Plants

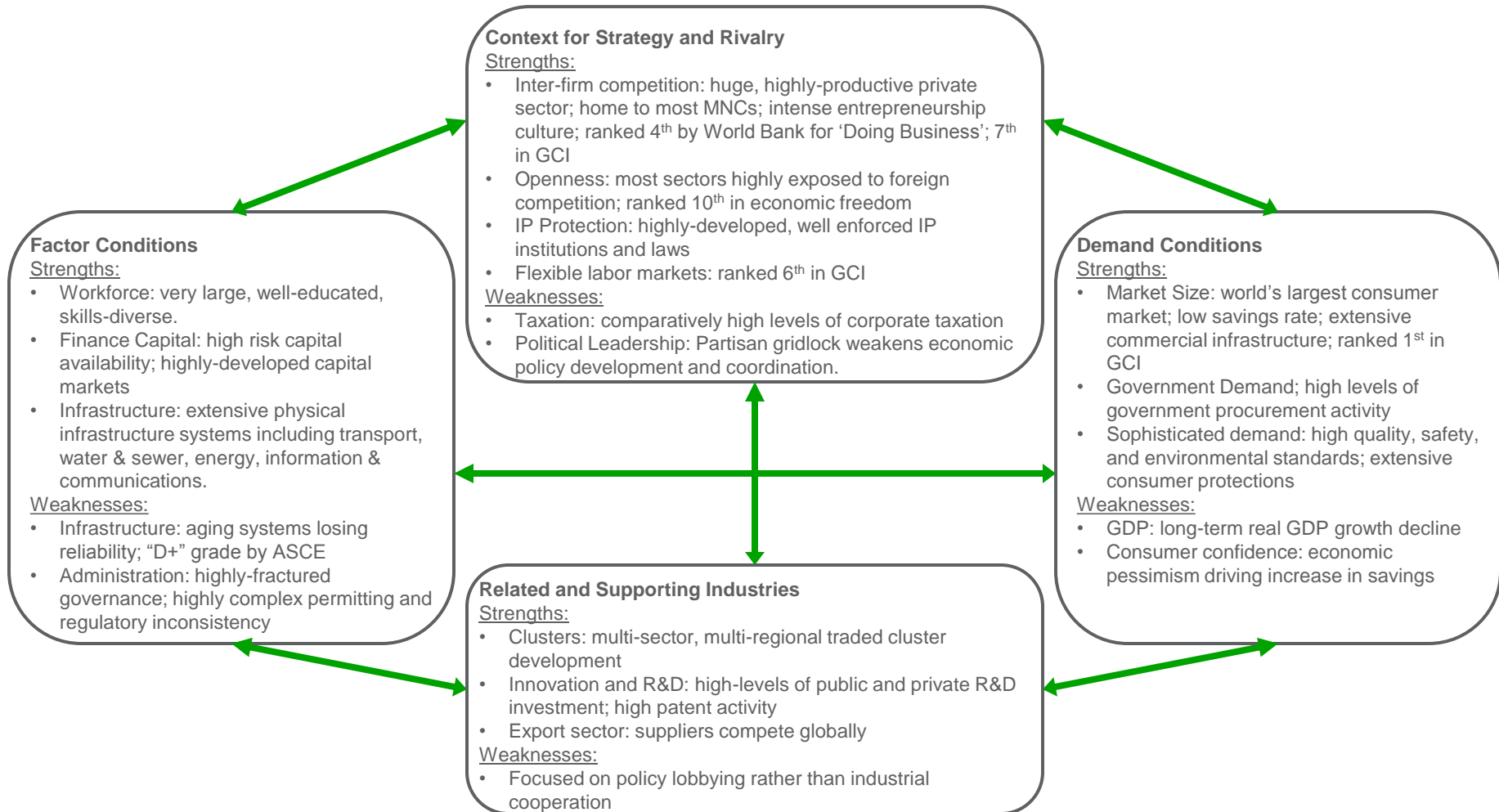
Kansas Manufacturing Plants and Share of Economic Output



Source(s): U.S. Bureau of Economic Analysis and U.S. Bureau of Labor Statistics and MAPI

Porter Finds U.S. Very Competitive, Weaknesses Are Policy Driven

United States National Competitiveness



Source(s): Michael Porter, Harvard

- **Economic Reasons For More Local Sourcing Versus Offshoring**
 - Value of the dollar-down 20% since 2002
 - Cost of shipping-air, truck, ocean
 - Natural disaster supply disruption-tsunami, earthquake, volcano, flood
 - Slow growth in U.S. manufacturing unit labor cost in the last 10 years
 - Very low natural gas price in the U.S.
 - Rapid increase in labor costs in China (developing countries)
 - Customer demand for just-in-time delivery and collaboration

The Other Costs of Offshoring

- **Vendor Costs**

- The cost of adding a new supplier
- The travel costs to visit them or vice versa
- Are they able to keep you ahead of your competition
- The difficulty in managing an extended supply chain
- High turnover? The time/money training them
- Legal cost and intellectual property protection

- **Usage Costs**

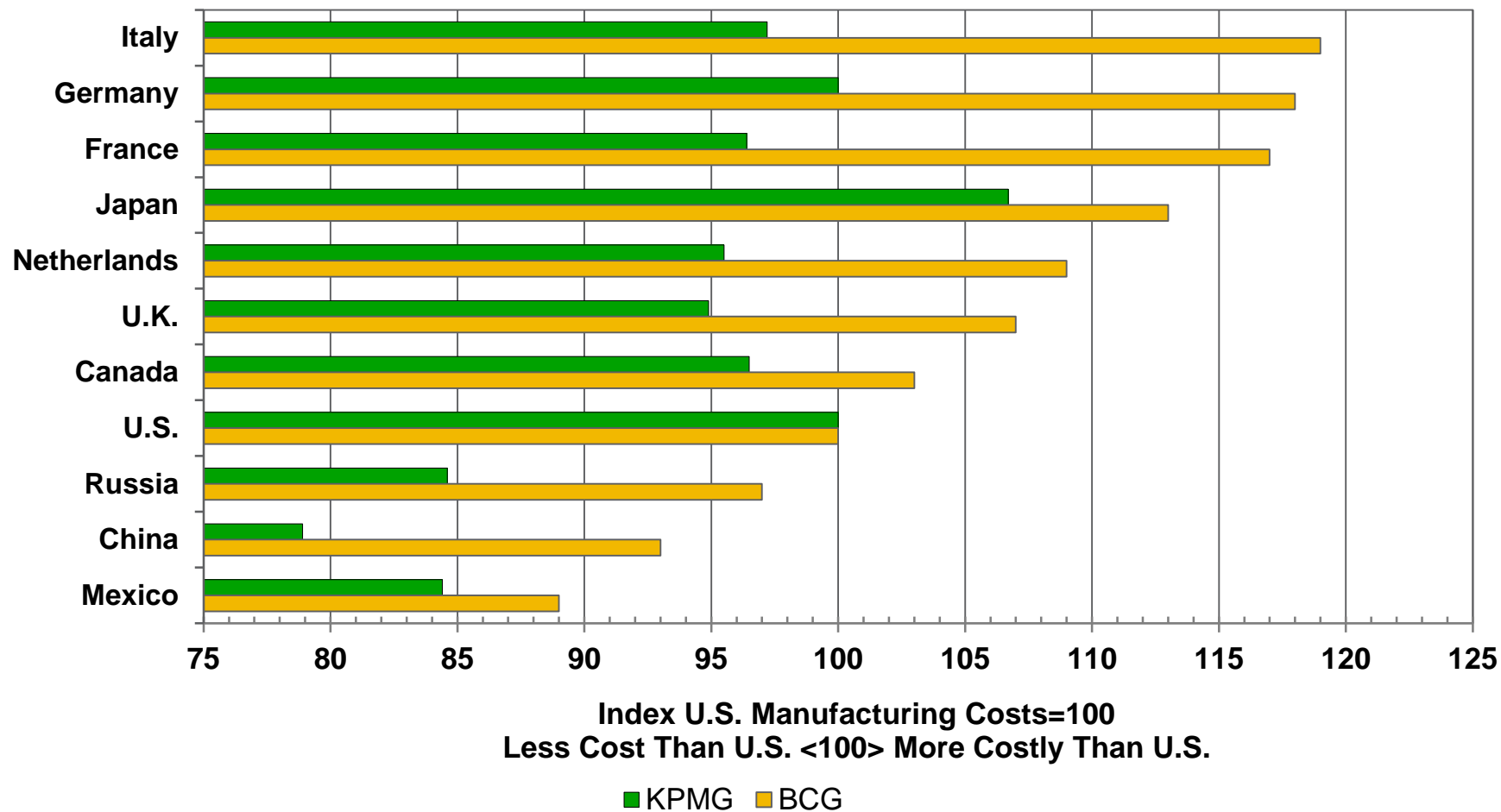
- Additional inventory
- Will quality or delivery issues shutdown your plant?
- The cost of rework or warranty costs
- Speed to market
- R&D capabilities
- Tooling

- **Transaction Costs**

- Need for expediting
- Freight cost, tariffs, insurance
- Inspection costs

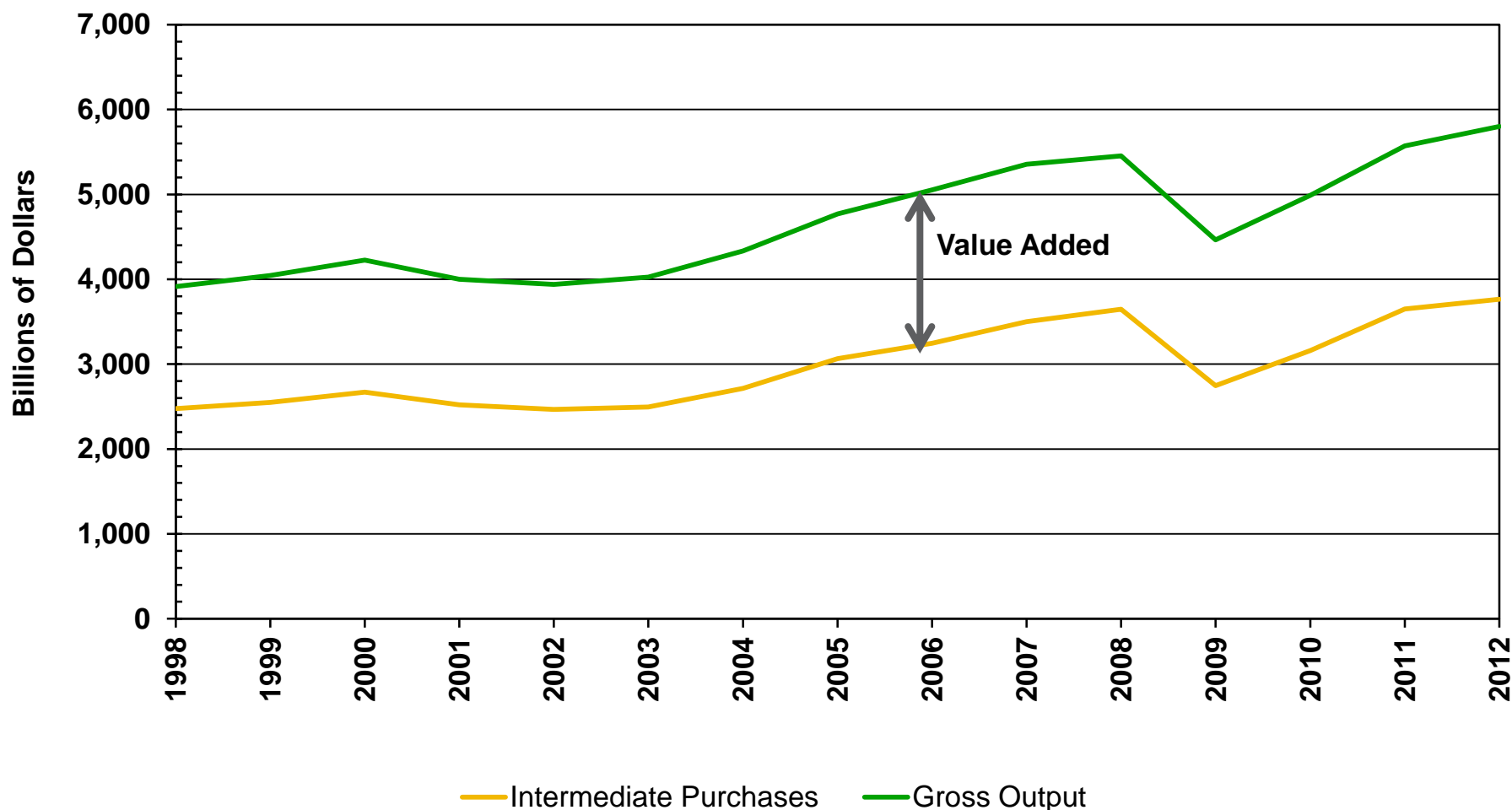
U.S. Has an Operating Cost Advantage With Advanced Countries When Productivity Is Factored In

U.S. Manufacturing Cost Competitiveness With Selected Countries, 2012



The Sourcing Decision for Domestic or Foreign Outsourcing Determines Whether There Is A Resurgence

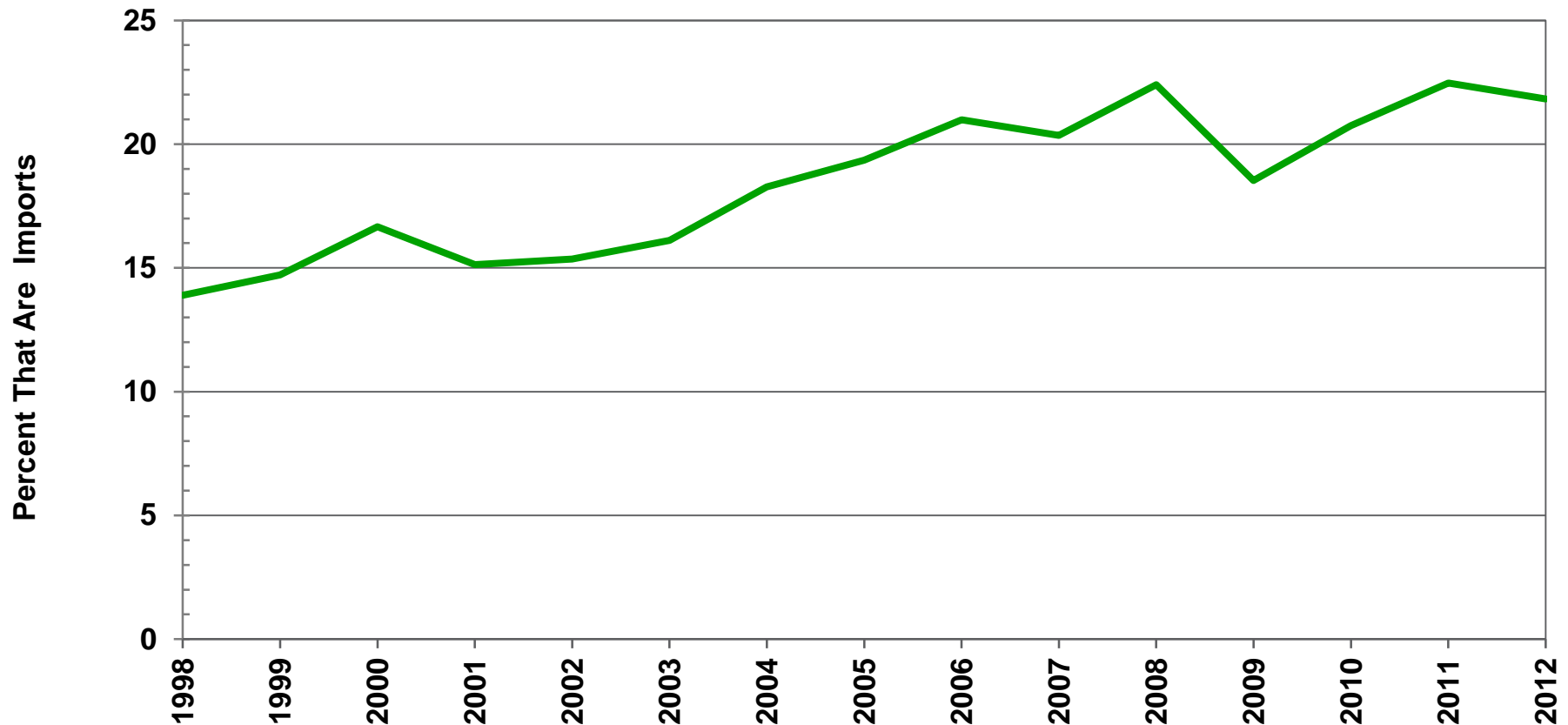
Manufacturing Gross Output and Intermediate Purchases



Source(s): U.S. Bureau of Economic Analysis and MAPI

The Import Share of Intermediate Manufacturing Purchases May Be Flattening Out

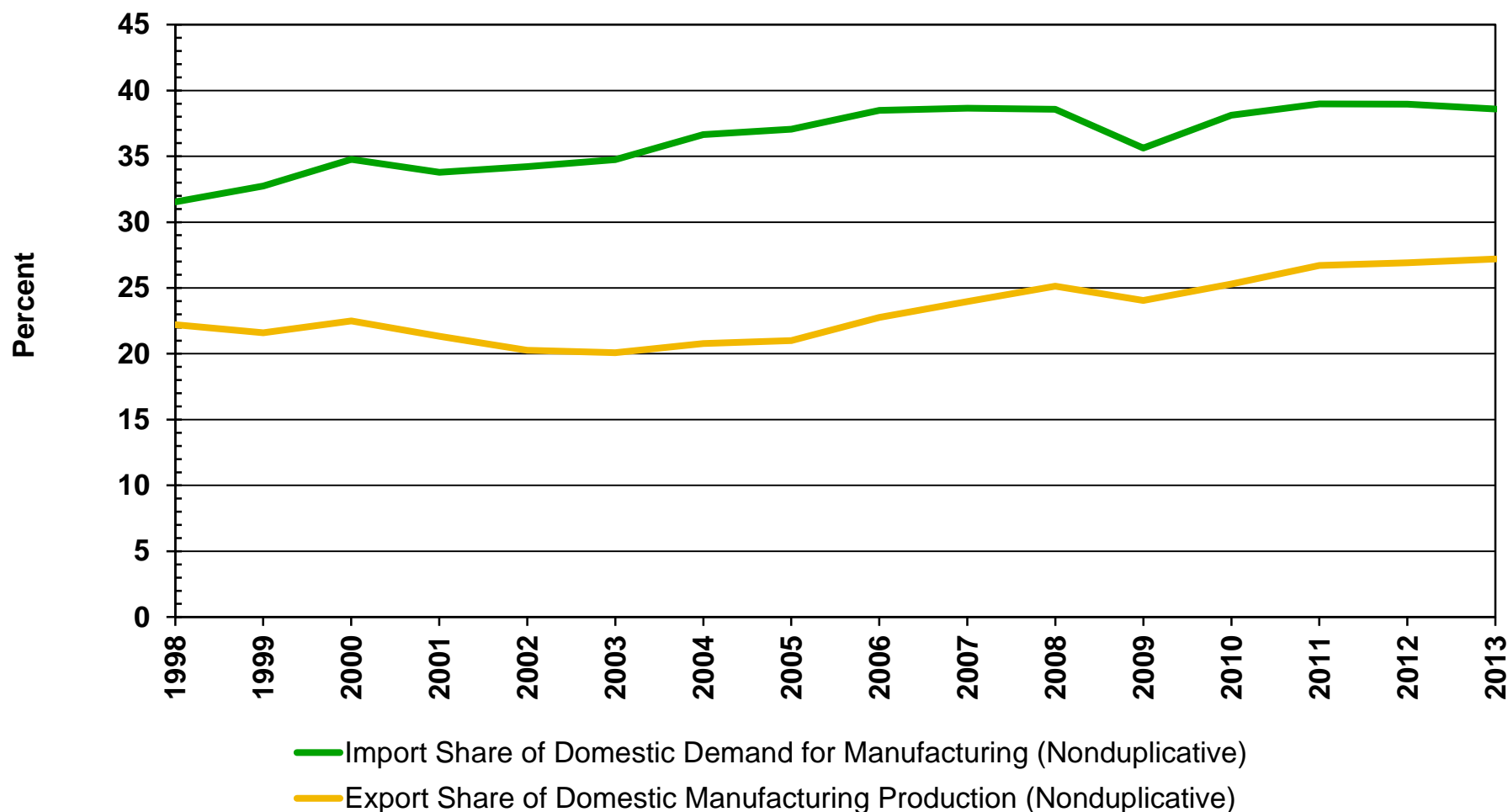
Manufacturing Import Share of Intermediate Purchases of Manufactured Goods



Source(s): U.S. Bureau of Economic Analysis and MAPI

A Sign of Progress Is Manufacturing Trade Is Moving In A Favorable Direction

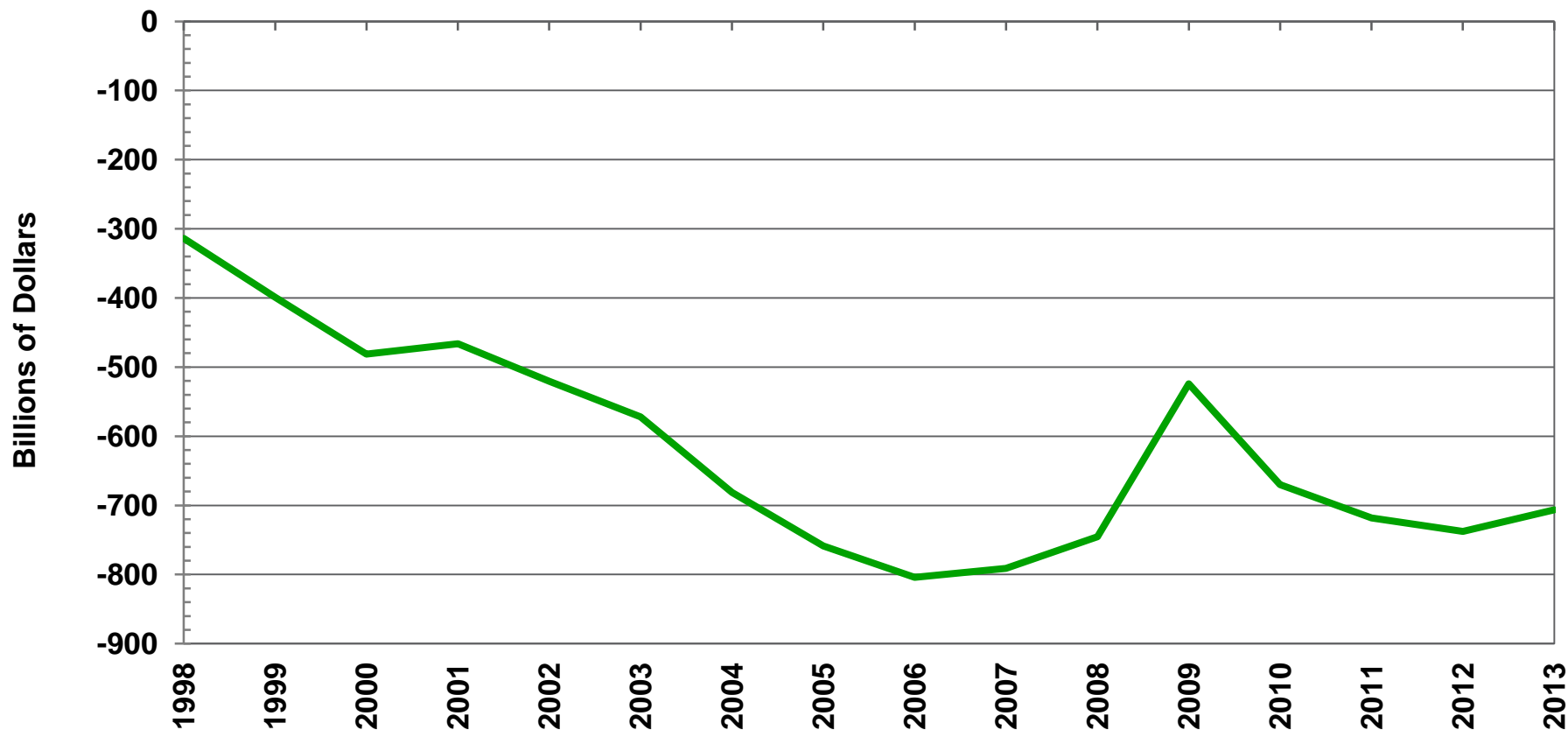
Import and Export Shares in Manufacturing Commodities



Source(s): U.S. Bureau of Economic Analysis and MAPI

The Trade Deficit In Manufacturing Somewhat Improved

Manufacturing Net Exports (Exports Minus Imports)



Source(s): U.S. Bureau of Economic Analysis and MAPI

Manufacturing Resurgence Simulation Returns Share of GDP to Near 16 Percent by 2025

Value Added By Industry

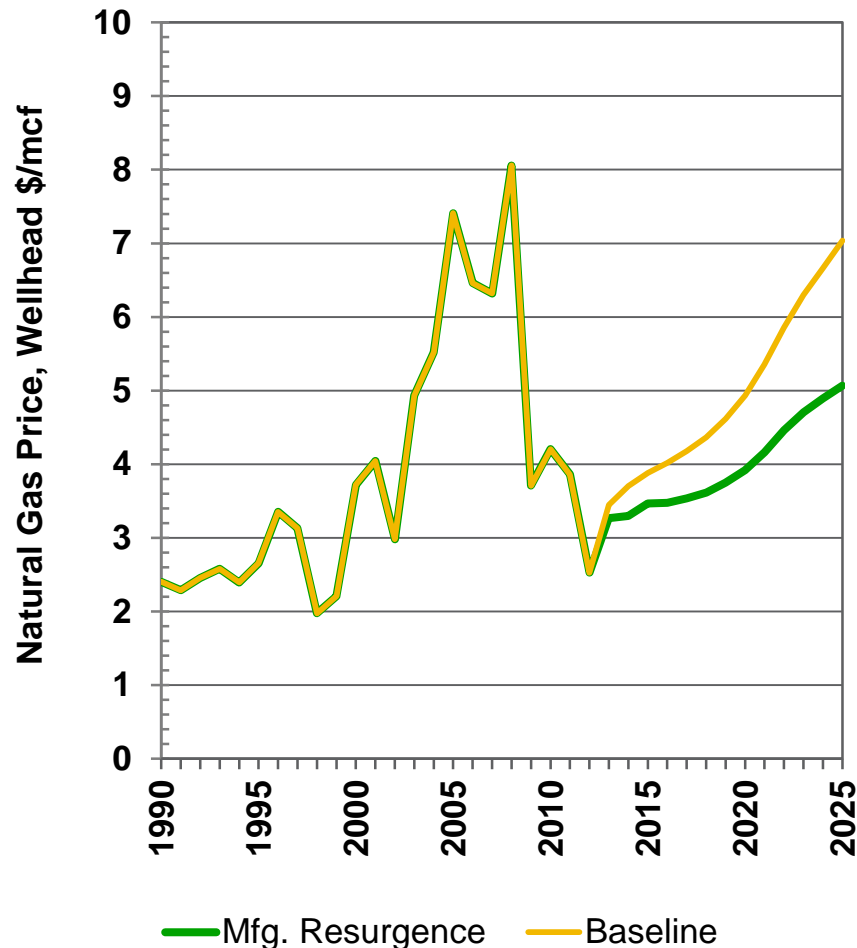
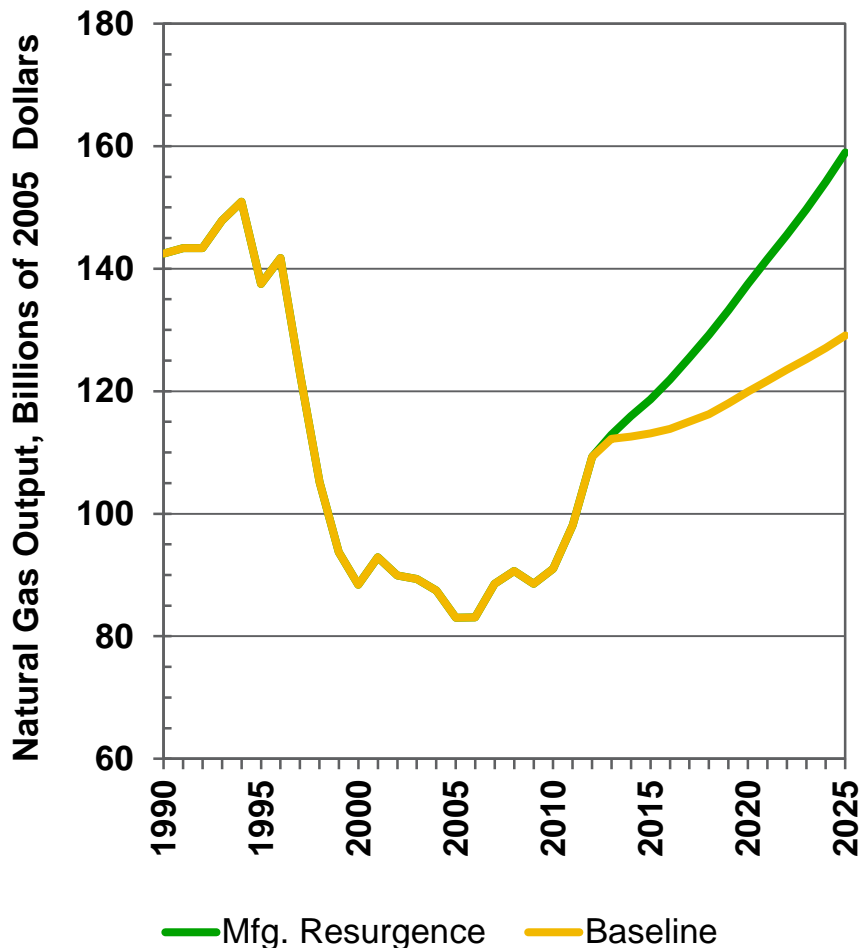
	Percent of GDP*			
	1998	2012	Baseline 2025	Mfg. Resurgence 2025
Agriculture, forestry, fishing	1.1	1.1	1.0	1.0
Mining	1.0	1.9	2.9	2.9
Construction	4.4	3.7	4.4	4.0
Manufacturing	15.1	11.6	11.1	15.8
Wholesale and retail trade	13.8	12.2	11.4	10.8
Transportation services	3.2	3.1	3.2	3.2
Finance, insurance, real estate	19.2	20.0	21.1	19.9
Professional, business services	10.6	12.0	12.2	11.9
Education, health, social services	6.9	8.6	9.6	8.7
All government	12.5	13.2	11.3	11.1

*Not all sectors are listed, totals do not add to 100

Source(s): MAPI-Aspen-Inforum Study, The Manufacturing Resurgence

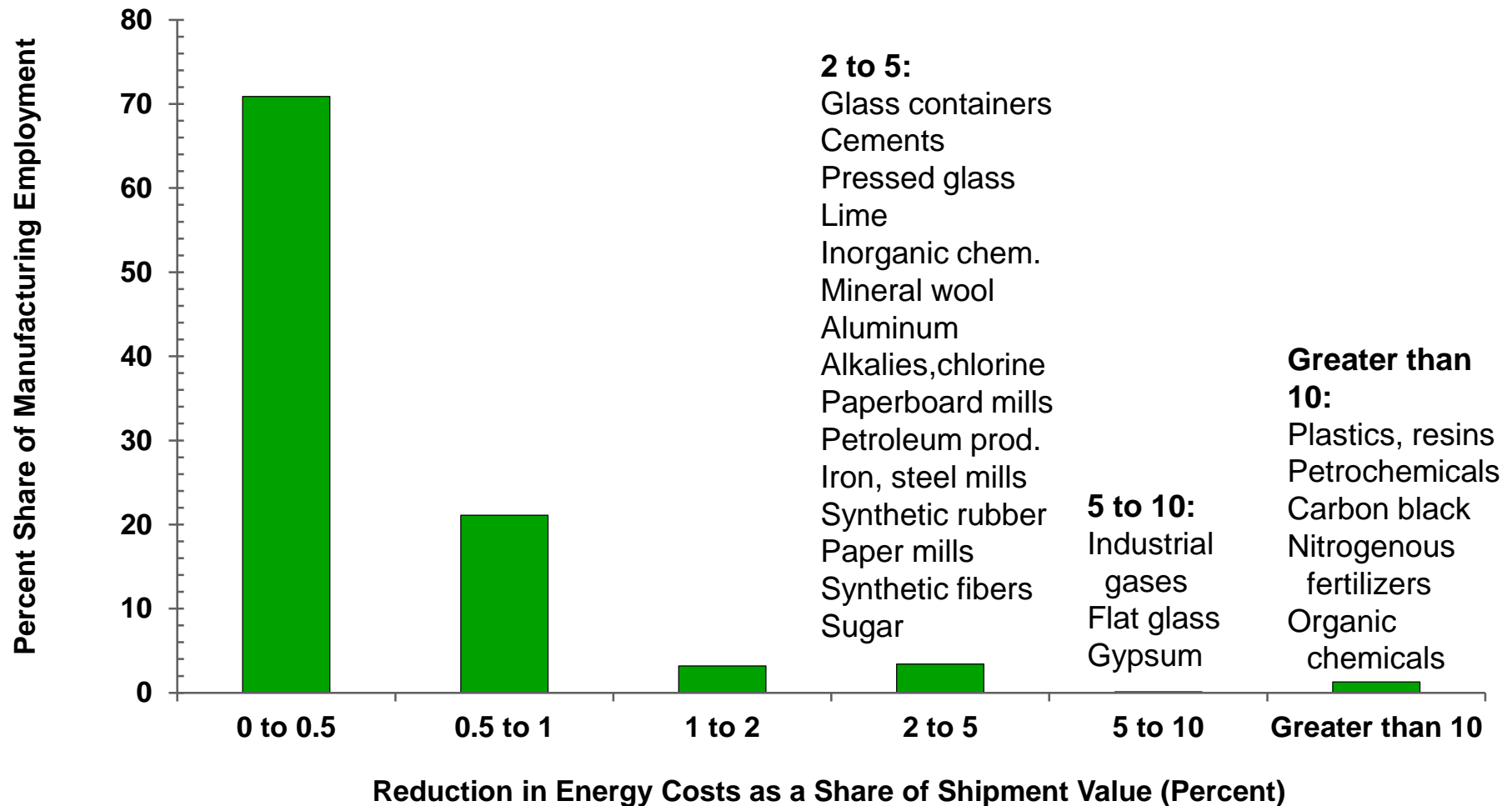
New Natural Gas Shifts Out the Supply Curve, Increases Competitiveness

Ample Natural Gas Supplies Drive Down Price, Provide Incentive to Onshore Energy Intensive Activities



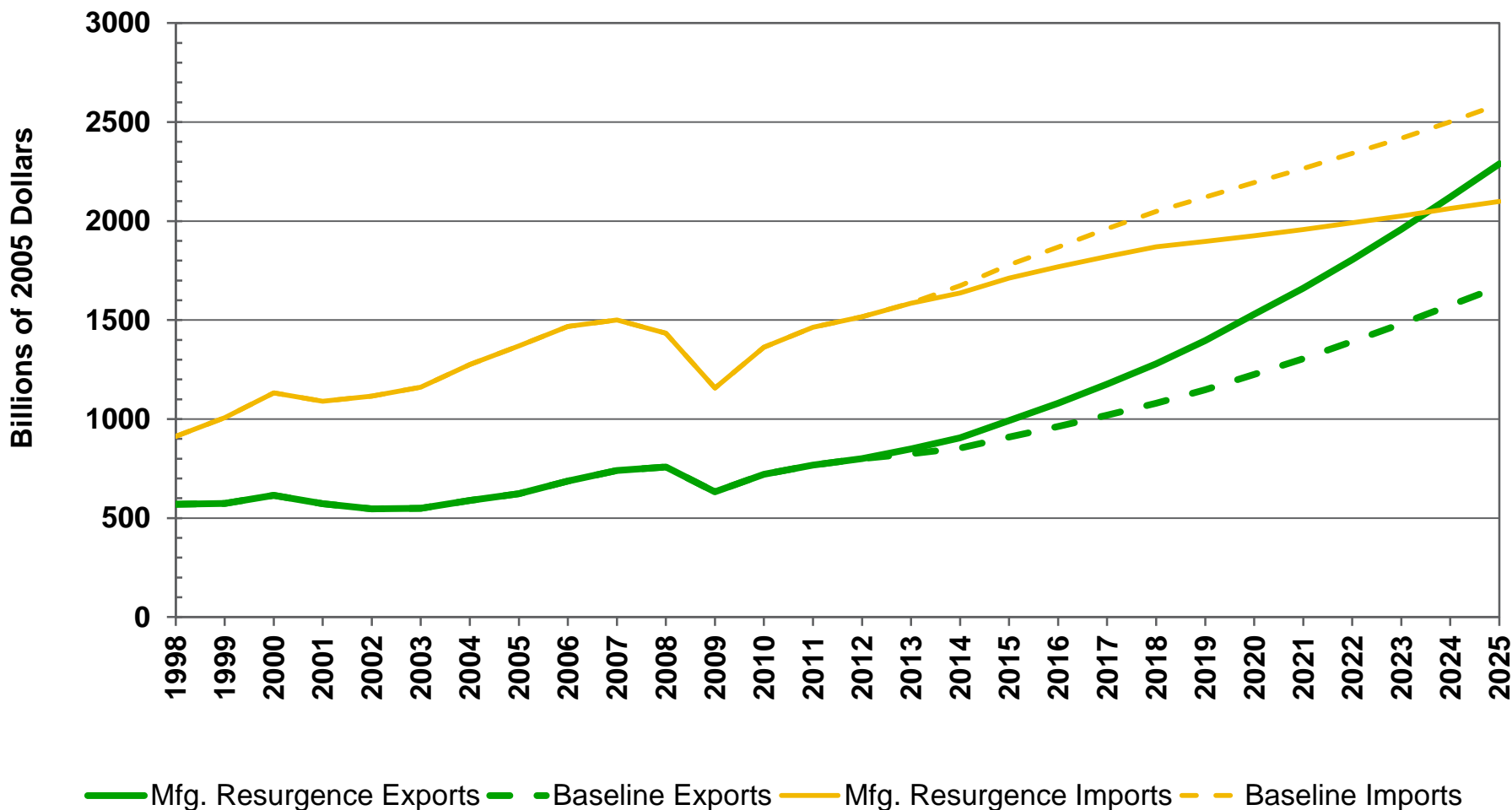
Unconventional Oil and Natural Gas Is Important, But Not the Game Changer

Distribution of U.S. Manufacturing by Potential Cost Reduction from Lower Energy Prices, 2011



Two-Thirds of the Resurgence Comes From Trade

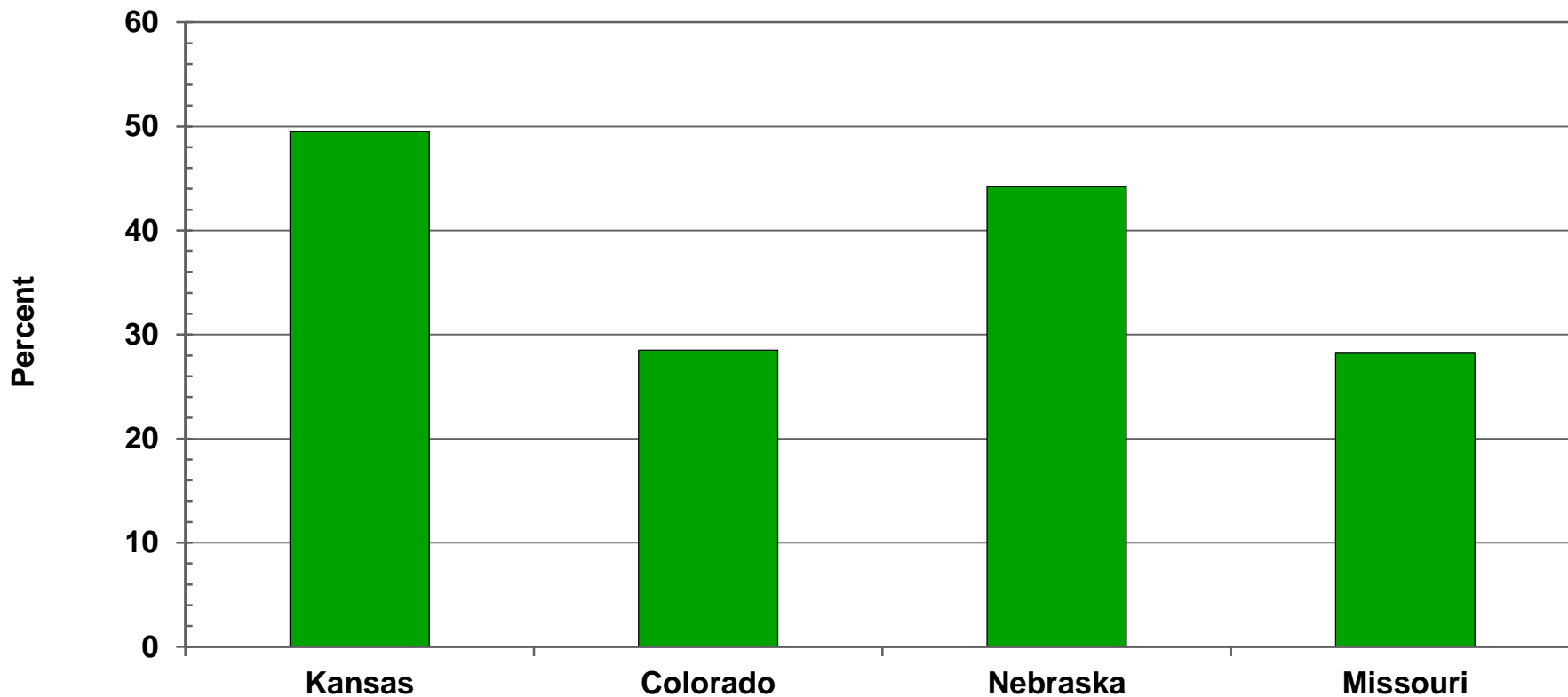
Boosting Real Manufacturing Demand: Exports and Imports



Source(s): MAPI-Aspen-Inforum Study, The Manufacturing Resurgence

Kansas Needs More Diverse International Exports

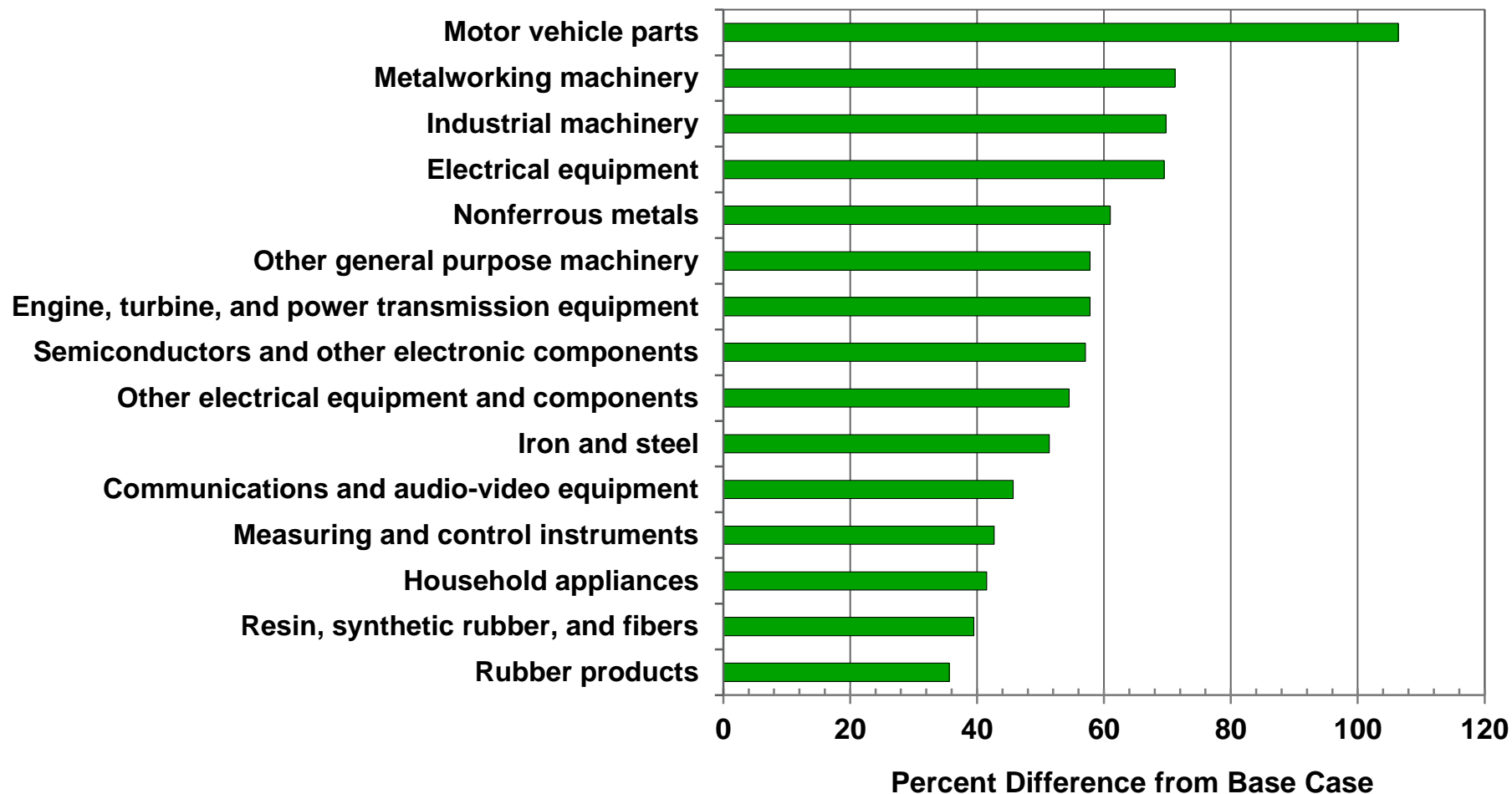
Top Ten Commodities as a Share of Total State International Exports, 2013



Source(s): U.S. Census Bureau and MAPI

Industries Supporting Business Investment Benefit Most From A Manufacturing Resurgence

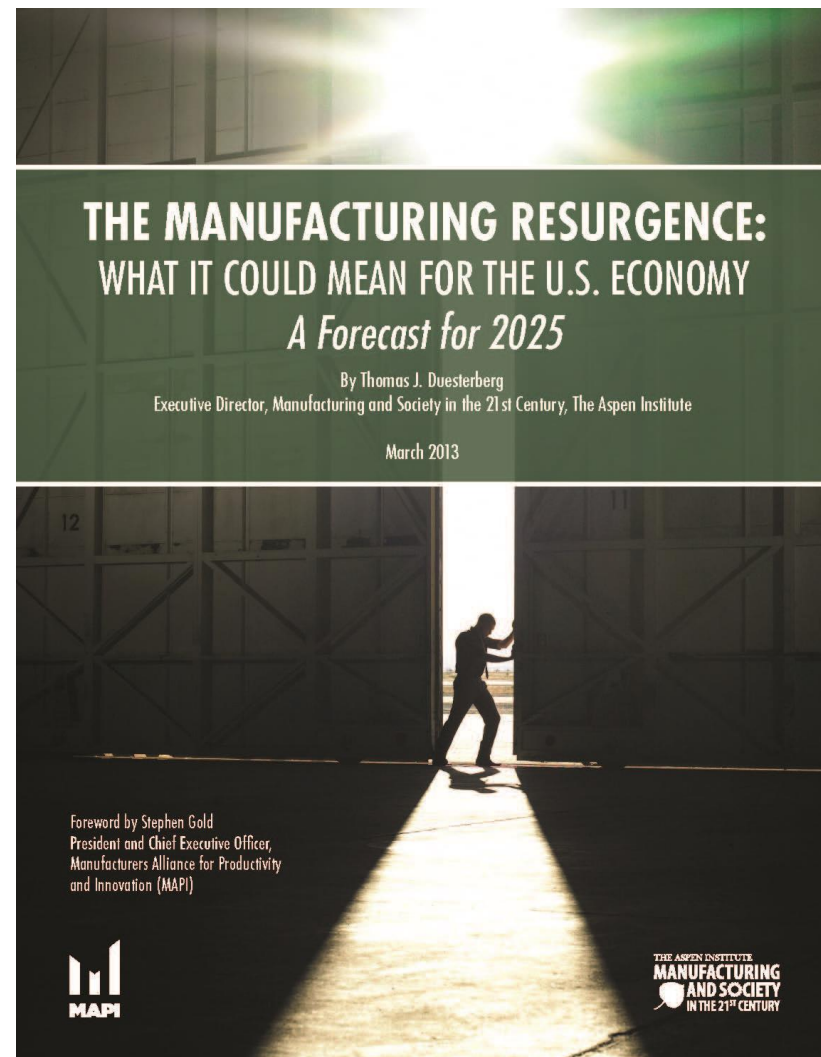
Output of Top 15 Producing Sectors (Billions of 2005\$), 2025



No Radical Policy Changes Needed, Accelerate Current Plans

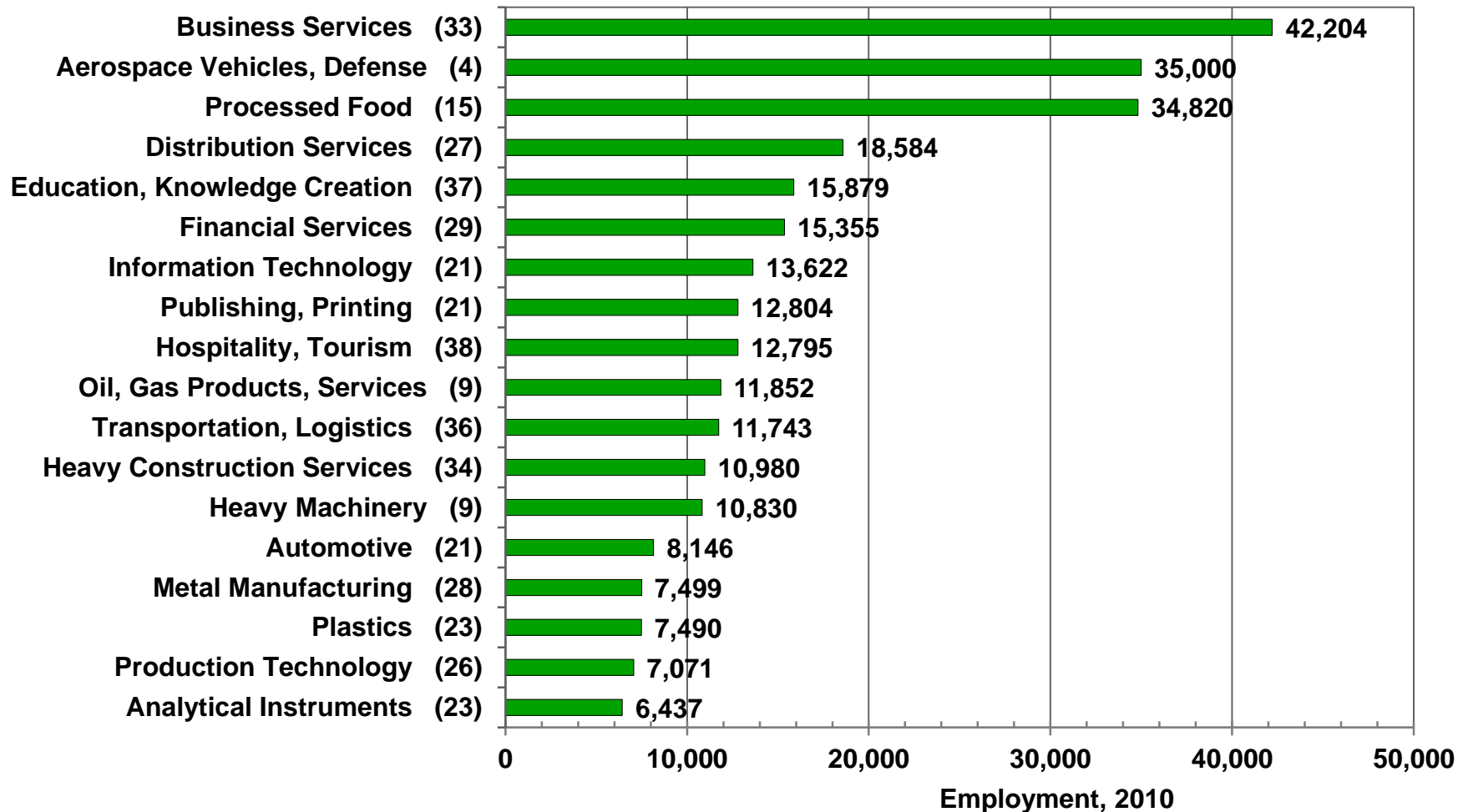
Supportive Policies Needed

- Trade Policy
- Energy Policy
- Regulation
- Skilled Workforce
- Tax Policy
- Technology Policy



Kansas Excels in Four Clusters

Kansas Employment by Traded Cluster, 2010

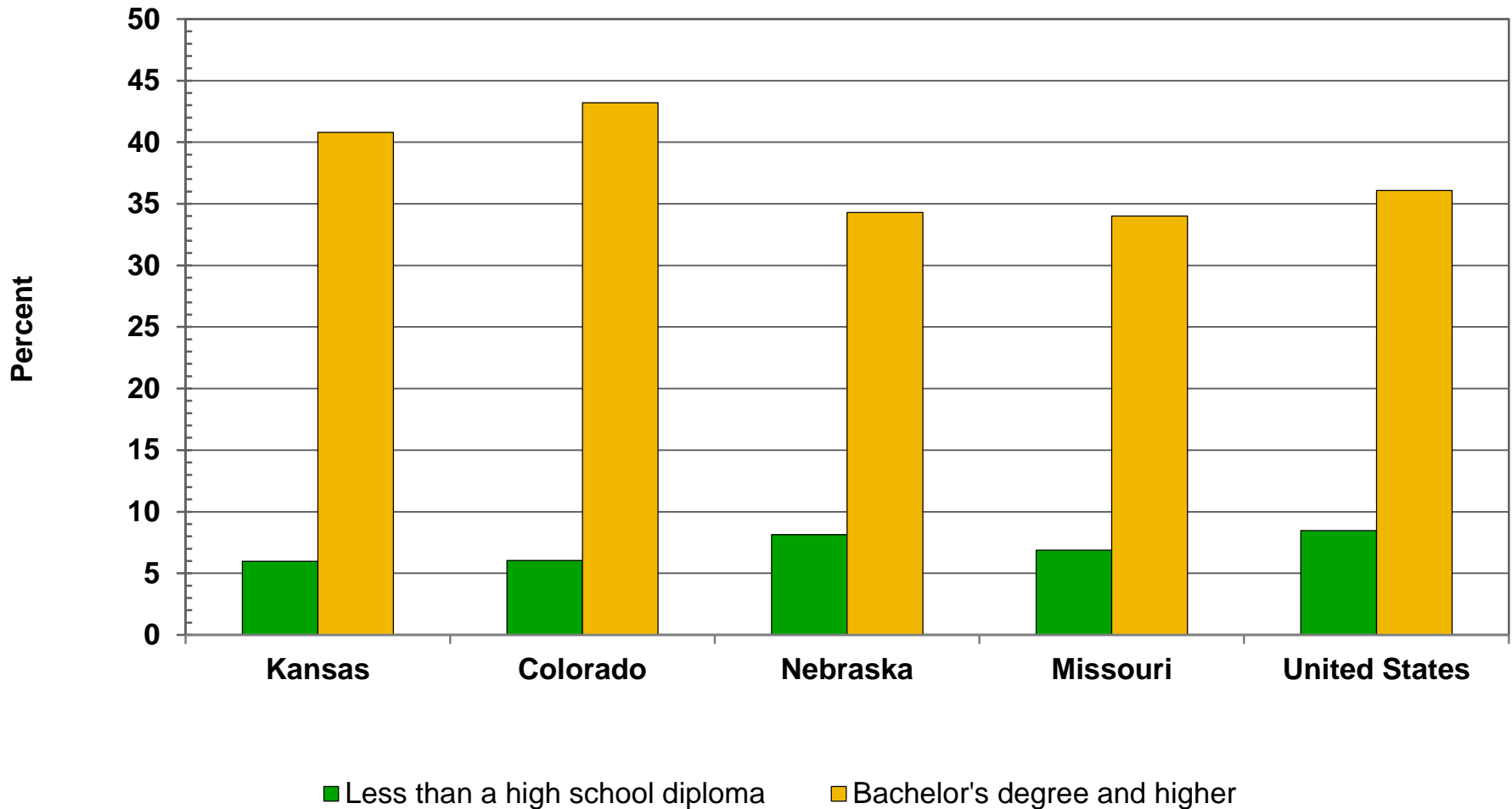


Note: Numbers in parentheses display employment rank in the U.S. 1 is first, 50 is last.

Source(s): Harvard Cluster Mapping, Michael E. Porter

A Relatively Competitive Region for Educational Attainment

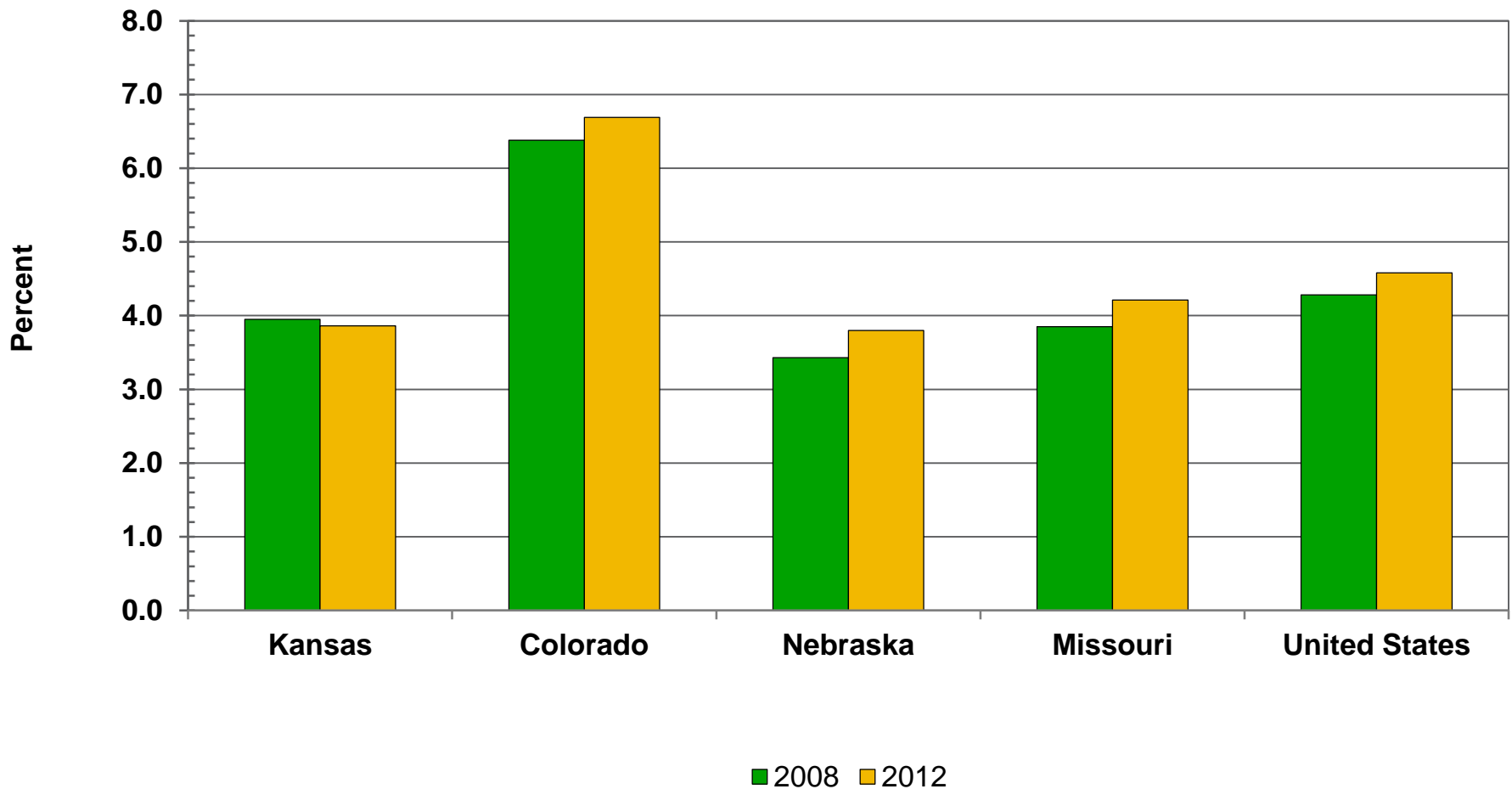
Educational Attainment, Percent of Civilian Labor Force, 2012



Source(s): U.S. Bureau of Labor Statistics and MAPI

The Region Holds Its Own in the Size of the R&D Workforce

Full Time Equivalent Science and Engineering Employment as a Percent of the Labor Force



Source(s): National Science Foundation

The Complaints Are The Same—County Executives, SMEs, and Multinational CEOs

- **What Colorado County Economic Development Executives Say They Need For Growth**
 - The state to be more pro-business
 - Get rid of red tape
 - Better access to capital
 - Better trained work force
 - Market the state as a place for entrepreneurs and where businesses can grow
 - Focus on technology and innovation

Some Recommendations

- **Leverage Existing Clusters**
 - Build bridges between firms and universities for joint R&D
 - Transfer university R&D, Fed labs, and manufacturing innovation institute technology to entrepreneurs
 - Have a targeted recruitment and retention plan for firms in clusters
 - Develop co-locating supplier base
- **Identify and Nurture Gazelles and Recruit Foreign Firms**
- **Skilled Workforce**
 - Align workforce skills with market need, retrain when skills change
 - Training partnership with colleges, industry, worker oversight boards
 - Create a high quality of life to recruit and retain talent
- **Aid the Development of Export Markets in Emerging Countries**
 - Missions, Federal Exim bank, leverage embassies
- **Train and Promote Entrepreneurship**